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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/772,469	01/30/2001	Michael Lanzaro	7157-271	1673
27383	7590	10/06/2003	EXAMINER	
CLIFFORD CHANCE US LLP			KIM, AHSHIK	
200 PARK AVENUE			ART UNIT	
NEW YORK, NY 10166			PAPER NUMBER	
			2876	

DATE MAILED: 10/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/772,469

Applicant(s)

LANZARO ET AL.

Examiner

Ahshik Kim

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,16-20,22,25-27,29 and 31-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 27 is/are allowed.
- 6) ☒ Claim(s) 1,3-6,16-20,22,25,26,29 and 31-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☒ Interview Summary (PTO-413) Paper No(s). 10.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. 6) ☐ Other: _____

DETAILED ACTION

Withdrawal of finality

1. During the telephone interview held on July 2, 2003, the Applicants explained the
5 claimed invention (paper #10). Although the claims could have been written in a clearer manner, the Examiner agrees on that the cited references may not clearly read on the claimed invention. Accordingly, the finality of the Office Action (paper #9) is withdrawn, and Applicant's amendment/response is reconsidered.

Amendment

10 2. Receipt is acknowledged of the amendment filed on July 23, 2003. In the amendment, claims 2, 7-15, 21, 23-24, 28, and 30 were canceled; claims 1 and 27 were amended; and claims 34 and 35 were newly added. Currently, claims 1, 3-6, 16-20, 22, 25-27, 29, 31-35 remain for examination.

Claim Rejections - 35 USC § 103

15 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

20 (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

25 4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

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claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5 Claims 1, 3-6, 16-19, 22, 25, 26, 29, 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bunte et al. (US 5,873,070, previously cited) in view of Reynolds (US 6,149,063).

Re claims 1, 3-5, 16, 17, 34, and 35, Bunte teaches a portable data collection device 10, comprising a display device 18, appropriate circuitry for decoding of captured data, which communicates with host machine in wireless manner, and the host machine in turn is a part of wireless network (col. 4, lines 53+). As shown in figures 3 and 4, the terminal 10 contains connectors/bosses 50 and 52, and a scanner 26 which can be a laser scanner. One of the peripherals, which can be connected to terminal 10, is touch panel as recited in claim 7 (col. 3, lines 5+). A variety of data collection peripherals such as a scanner, a keyboard, and a headset 16 can be wirelessly connected to the terminal 10 (col. 5, lines 45-53).

Since Bunte's embodiment comprises a network environment, and it is inherent that the components (i.e., base station, terminal, peripheral devices) in the network can be uniquely identified in electronic sense, Bunte, however, fails to specifically teach or fairly suggest that the terminal has label affixed to the device.

Reynolds teaches wireless field association between the scanner 50 and the base/interface station 32 (see figure 2; see abstract) wherein the terminal reads the barcode associated with the

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base station in order to properly transmit captured data to the base station and further to the remote machine (col. 2, lines 12+).

In view of Reynolds' teaching, it would have been obvious to an ordinary skill in the art at the time the invention was made to employ an association between the portable data reader and the base station utilizing barcode in order to ensure that the barcode reader can only be actuated (or properly channeled) after the association with the base station had been made. In wireless environment, many data collection devices are active, and simultaneously used by many users. Accordingly, there exist needs for ensuring that the terminals are properly activated by authorized person(s). By linking the terminals and base/interface station, entered/scanned transactions can be considered properly entered, and traced back for audit purposes, and therefore an obvious expedient.

Re claim 6, the terminal 10 is further provided with battery packs 62 (col. 5, lines 54+; col. 8, lines 35+), and the terminal can be recharged by in a wall-mounted recharger (col. 9, lines 11-26). Although it may not explicitly a form of a cradle, any recharging station in which the terminal can be placed can be functional equivalent of a cradle recited in the claim.

Re claim 18, optically readable information 22 such as barcode on an object is decoded and displayed to the user via his display (col. 5, lines 5+). As well known in the art, the reader contains photosensitive array such as CCD to capture the indicia/image to be read (col. 11, lines 45+).

Re claim 19, the system 10 further includes a headset 16 and microphone 20 (col. 4, lines 53+;) for receiving voice commands. Figures 10 and 11 further show voice recognition features of the system.

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Re claim 22, Bunte's device 10 discloses various holders 54 and 56 for peripheral device.

Furthermore, Bunte teaches that the batteries 62 are connected to the terminal 10 (col. 5, lines 54+) and be recharged while connected to the terminal 10. The series of batteries can be pivotally interconnected so that the battery can be utilized in serial, parallel or sequentially.

5 Although not shown, the battery system further includes indicator light showing charge-state of the system.

Re claim 25, as shown in figure 8, the system incorporates a scheme wherein the low-powered channel is selected and tested for acceptable reception of the signal. Based on the testing, the channel is selected or increased iteratively for optimal power use (col. 6, lines 13+).

10 Re claim 26, although not disclosed in explicit manner, the device 10 is part of the network as shown in figure 10. Accordingly, the network is operated by a network protocols such as communications protocols 152 (col. 6, lines 43+). It is well known that such communication protocol provides time limit and request for communication is dropped if the message is not subsequently received once initiating protocol is accepted.

15 Re claim 29, since data collection system is in the embodiment of a belt, which is made up of durable plastic or foam material, it would provide protection for the component parts against unintended banging/hitting.

6. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bunte et al. (US 5,873,070) as modified by Reynolds (US 6,149,063) as applied to claim 16 above, and further in
20 view of Rando et al. (US 6,290,134, previously cited). The teachings of Bunte as modified by Reynolds have been discussed above.

Bunte/Reynolds fail to specifically teach or fairly suggest of indicating that the portable data collector is out of range when the distance exceeds working range between the terminal and the base.

Rando teaches a portable data collection terminal wirelessly interfacing with the host
5 wherein the indication/warning is provided when the scanner module 10 is separated beyond working distance from the host (col. 9, lines 22+).

In view of Rando's teaching, it would have been obvious to an ordinary skill in the art at the time the invention was made to employ well-known "wireless handcuff" to the teachings of Bunte/Reynolds in order to ensure operation of the system without loss of data. By
10 implementing such out-of-range indicator, the users can ensure to work in operable range from the host avoiding loss of data or redundant data entry/operation. Moreover, since the host can keep track of all portable devices, the loss resulting from lost/stolen terminal can be reduced, and thus an obvious expedient.

15 7. Claims 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bunte et al. (US 5,873,070) as modified by Reynolds (US 6,149,063) as applied to claims 1 and 26 above, and further in view of Hannigan (US 6,513,717, previously cited). The teachings of Bunte as modified by Reynolds have been discussed above.

Bunte/Reynolds fail to specifically teach or fairly suggest a data collection system uses
20 Bluetooth protocol.

Hannigan teaches a data collection system comprising a plurality of optical scanners in a network environment (col. 2, lines 17+), and the component devices in the network utilizes Bluetooth protocol (col. 2, lines 17+; col. 4, lines 17+).

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Bluetooth is radio frequency standard developed by a group of electronics manufacturers allowing communications among a wide ranges of electronic equipments. In a broader view of network environment, infrared, RF and other wireless method (for that matter wired network can be included) allowing participating node/devices to communicate, they can be considered functionally equivalent. In view of Hannigan's teaching, it would have been obvious to an ordinary skill in the art at the time the invention was made to select a well-known network protocol such as Bluetooth as a network infrastructure in implementing data collection system. Since Infrared, RF and other wireless connections do not require physical wiring of the nodes, they would be advantageous allowing free movement of devices, and therefor an obvious expedient.

Allowable Subject Matter

8. Claim 27 is allowed.

9. The following is a statement of reasons for the indication of allowable subject matter: the claims are directed at a portable data collection device wirelessly communicating with at least one data transmitting unit using a first wireless protocol; and a second wireless protocol to communicate with a host. As indicated in above paragraphs 5-7, multi-layered wireless protocol between the portable unit to a base/interface and from the base/interface to a host is well known in the art. The devices in the system also have capacity to indicate the status of its own battery to the users. However, the cited references, taken alone or in combination, fail to show or fairly teach that a data collection device associated with a plurality (at least one) data transmitting unit

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wherein the data collection device shows remaining power of each data transmitting unit as set forth in the claims.

Conclusion

5 I. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Campo et al. (US 6,138,914) disclose a portable scanner associating with a base/host machine.

10 II. Any inquiry concerning this communication or earlier communications from the examiner should be directed to *Ahshik Kim* whose telephone number is (703)305-5203. The examiner can normally be reached between the hours of 6:00AM to 3:00PM Monday thru Friday.

15 If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee, can be reached on (703) 305-3503. The fax number directly to the Examiner is (703) 746-4782. The fax phone number for this Group is (703)308-7722, (703)308-7724, or (703)308-7382.


Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [ahshik.kim@uspto.gov].

20 *All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.*

25 Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.



30 Ahshik Kim
Patent Examiner
Art Unit 2876
September 22, 2003



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